

REMARKS

This is in response to the Final Office Action dated September 11, 2007. Claims 1, 2 and 4-16 are pending.

Claims 1, 7, 15 and 16 stand rejected under Section 103(a) as being allegedly unpatentable over Seko in view of Papathomas. This Section 103(a) rejection is respectfully traversed.

Claims 1, 7, 15 and 16 as amended all require that “the resin is configured so that pressing of the semiconductor element against the interconnection pattern through the resin after the resin has been provided on the substrate so forms a resin fillet, the resin fillet extending no more than about half-way up a sidewall of the semiconductor element and the resin fillet sealing the projecting electrode in electrical contact with the interconnection pattern.”

For example and without limitation, see Figs. 1(c)-(e) of the instant application. For example and without limitation, Fig. 1 of the instant application shows that insulating resin 7 is applied to insulating tape 1 and then the semiconductor element 3 is pressed from above so that the projecting electrodes 6 of the semiconductor element 3 are electrically connected with the interconnection pattern 2, and then the insulating resin 7 is cured to form the resin fillet 11. Note also applicants’ amendment to page 21 of the specification, which is amply supported by the spirit of the disclosure and the drawings.

Seko fails to disclose or suggest the aforesaid quoted subject matter of claims 1, 7, 15 and 16. In Seko, the resin is “injected” after the chip is attached (e.g., see [0055]). Thus, the resin in Seko does not form a fillet that extends no more than about half-way up a sidewall of the semiconductor element as required by these claims. Citation to Papathomas cannot cure this

flaw in Seko. Thus, even the alleged combination (which applicant believes would be incorrect in any event) fails to meet the invention of claims 1, 7, 15 and 16.

In Seko, the chip 1 is mounted on carrier tape 20 and then sealing resin is injected into a gap between the tape and the chip. The technique and resulting structure of Seko is entirely different than that of the pending claims.

The office action alleges that Papathomas teaches the claimed resin fillet. However, in Papathomas no consideration is made as to where to form encapsulant 5. Fig. 1 of Papathomas illustrates encapsulant 5 by dots, and consequently Fig. 1 of Papathomas does not clearly illustrate where encapsulant 5 is to be formed with respect to chip 1. From what can be gleaned from the cryptic illustration of Papathomas Fig. 1, the encapsulant 5 could cover the entire sidewall of chip 1. In such case, the postulated combination would result in encapsulant 5 covering the entire sidewall or essentially all of Seko's chip except the top surface thereof.

Consequently, Papathomas lacks any concrete teaching pertinent to Applicant's claims. The combination is flawed and thus the rejection fails.

It is respectfully requested that all rejections be withdrawn. All claims are in condition for allowance. If any minor matter remains to be resolved, the Examiner is invited to telephone the undersigned with regard to the same.

SEKO
Appl. No. 10/668,234

Respectfully submitted,

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